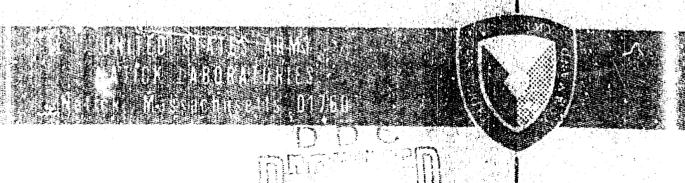
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TECHNICAL REPORT 69-1

### BIBLIOGRAPHY OF TECHNICAL PUBLICATIONS AND PAPERS

July 1967 - June 1968

August 1968

U. S. ARMY NATICK LABORATORIES Natick, Massachusetts 01760

#### **FOREWORD**

This bibliography is a list of technical publications and papers by personnel of the U. S. Army Natick Laboratories and its contractors for the period July 1967 through June 1968.

Reprints of journal articles, in some cases, are available from the individual authors. Copies of technical reports may be obtained from (1) the Defense Documentation Center, Cameron Station, Alexandria, Virginia 22314, or (2) the Clearinghouse for Federal Scientific and Tachnical Information, Springfield, Virginia 22151. The "AD" number should be cited when ordering copies of reports. Those reports marked with an asterisk (\*) are not available for distribution outside the agencies of the Department of Defense.

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### ABSTRACT

A bibliographic listing of technical publications and papers by the personnel of the U. S. Army Natick Laboratories and its contractors for the period July 1967 through June 1968.

### U. S. ARMY NATICK LABORATORIES

### OFFICE OF THE COMMANDING GENERAL

### Journal Articles

- 1. MANTZ, W. M. Management and operational activities at the Natick Laboratories. Army Management Views, 12(1):89-97 (1967).
- 2. Natick Laboratories support Army aviation. U. S. Army Aviation Digest, pp.2-4 (July 1967).

### Technical Papers

- 3. GERACE, F. J. Remarks. Dedication Ceremony, Federal Regional Center, Office of Civil Defense, Maynard, Mass., 10 June 1968.
- 4. Remarks. Memorial Service honoring General Douglas
  MacArthur, Trinity Church, Boston, Mass., 28 June 1968.
- Remarks. Research and Development Associates,
  Baltimore, Md., 15 April 1968.
- 6. MANTZ, W. M. Your role as an Army Officer. Officer Candidate Class 67-15, U. S. Army Quartermaster School, Fort Lee, Va., 4 October 1967.
- RIORDAN, C. T. Natick Laboratories and textile Army needs. Conference, E. I. duPont de Nemours & Co., Inc., Natick, Mass., 4 October 1967.
- 8. NLABS After twenty-five years of work on R&D items for troops. Founder's Day, U. S. Army Natick Laboratories, Natick, Mass., 7 December 1967.
- 9. NLABS provide troop support items to Southeast
  Asia. Sierra Madre Engineering Company, Sierra Madre, Calif.,
  1 May 1968.
- 10. Potpourri of food activity at NLABS. Military-Industry Conference, Research and Development Associates, Natick, Mass., 24 October 1967.
- 11. Potpourri of verisimilitudes for women. Meeting of the U. S. Army Natick Laboratories Women's Club, Natick, Mass., 10 January 1968.

### OFFICE OF THE COMMANDING GENERAL

- 12. RIORDAN, C. T. Remarks. Symposium on Flashblindness, Natick, Mass., 8 November 1967.
- Support of the soldier in Vietnam. Army Ordnance Association-AMC Laboratory Symposium, Fort Myer, Washington, D. C., 18 January 1968; ROTC Cadets, Indiana University, Indiana, Pa., 1 February 1968.

#### OFFICE OF SCIENTIFIC DIRECTOR

### Technical Reports

14. On inextensional vibrations of thin shells, E. W. ROSS, JR. 68-14-OSD, July 1967.

### Journal Articles

15. ROSS, E. W., JR. On membrane frequencies for spherical shell vibrations. J. Am. Inst. Aeronautics and Astronautics, 6(5):803-808 (May 1968).

### Technical Papers

- 16. OESTERLING, J. F. Helping the GI by counteracting natural and man-made environmental hazards. New England Association of Ice Cream Manufacturers, Rye, N. H., 19 September 1967.
- 17. SIBLING, D. H. Natick Laboratories, a center of research and development for the combat soldier. New England Regional Chapter, National Security Industrial Association, Waltham, Mass., 10 April 1968.

#### QUALITY ASSURANCE OFFICE

### Technical Papers

- 18. LEVELL, E. F. A management tool for aesthetic value engineering.
  Department of Defense In-house Value Engineer Conference,
  Washington, D. C., September 1967.
- 19. WERKOWSKI, S. J. Amplysis of ballistic residual velocity curves with the Weibull Distribution. Joint Interservice Body Armor Committee, Naval Medical Field Research Laboratory, Camp Lejeune, N. C., 28-29 February 1968.

### TECHNICAL LIBRARY

# Technical Report

Who were the constitution of the second of t

20. Laboratory animals: Their care and use in research, E. G. BEARY. Bibliographic Series 68-1, January 1968.

1. 16 Jack 15 . 19

表1

### TECHNICAL PLANS OFFICE

### Technical Reports

21. Bibliography of technical publications and papers: July 1966 - June 1967, U. S. Army Natick Laboratories. 68-1, July 1967 (AD 659343).

### Technical Papers

- 22. DUNGAN. A. L. The SPEED field feeding system. National Security Industrial Association Food Advisory Committee, Fort Lee, Va., 14 March 1968.
- The SPEED oven in integrated cooking. The International Microwave Power Institute, Boston, Mass., 21 March 1968.
- The SPEED system after a year of exploratory development. Research and Development Associates, Baltimore, Md., 16 April 1968.

#### AIRDROP ENGINEERING LABORATORY

### Technical Reports

- 25. Comparative evaluation of paper honeycomb testing, W. L. GUYTON, G. SPRETZ, and E. A. RIPPERGER, University of Texas, Contract No. DA19-129-AMC-582(N). 68-52-AD, March 1967 (AD 830508).\*
- 26. Evaluation of gas operated reefing line cutter, E. J. BROWN. 68-54-AD, May 1968 (AD 833914).\*
- 27. A general analysis of the factors influencing the preparation of loads for delivery by airdrop, J. F. FALCONE. 68-59-AD, April 1968 (AD 671627).
- 28. Ground impact shock mitigation, E. A. RIPPERGER, University of Texas, Contract No. DA19-129-AMC-582(N), Final Report. 68-47-AD, August 1967 (AD 830179).\*
- 29. Ground impact shock mitigation, cargo trailer M101, 3/4-ton, D. G. WIEDERANDERS, University of Texas, Contract No. DA19-129-ANC-582(N). 68-51-AD, July 1967 (AD 667938).
- 30. Ground impact shock sitigation, cargo truck, 3/4-ton, M37, D. G. WIEDERANDERS, W. L. GUYTON, and E. A. RIPPERGER, University of Texas, Contract No. DA19-129-AMC-582(N). 68-49-AD, December 1966 (AD 667939).
- 31. Ground impact shock mitigation drive-off system development, cargo truck, 3/4-ten M37, D. G. WIEDERANDERS, University of Texas, Contract No. DA19-129-AMC-582(N). 68-48-AD, July 1967 (AD 667937).
- 32. Ground impact shock mitigation, howitzer, 105MM, M2A1, D. G. WIEDERANDERS, University of Texas, Contract No. DA19-129-AMC-582(N). 68-50-AD, July 1967 (AD 667940).
- 33. Ground proximity airdrop system, J. L. MICHAL, Stencel Aero Engineering Corp., Contract No. DA19-129-AMC-502(N). 68-71-AD, February 1968 (AD 837338).\*
- Lifting of aerodynamic decelerators, R. W. OATES, C. A. YOST, and A. O. MARTINEZ, Stencel Aero Engineering Corp., Contract No. DA19-129-AMC-850(N). 68-66-AD, November 1966 (AD 669665).

#### AIRDROP ENGINEERING LABORATORY

### Technical Reports (continued)

- 35. Preliminary investigation of ballute-flexible rotor concept for iow altitude cargo airdrop, D. L. MANSFIELD, Goodyear Aerospace Corp., Contract No. DA19-129-AMC-857(N), Final Report. 68-70-AD, August 1966 (AD 670984).
- 36. Preliminary investigation of concepts for low altitude airdrop of personnel Exploratory development, R. A. LAU, Goodyear Aerospace Corp., Contract No. DA19-129-AMC-855(N), Final Report. 68-43-AD, December 1966 (AD 667401).
- 37. Preliminary investigation of trolley low altitude airdrop concept, C. W. MILLER, D. E. ALFORD, H. E. KOMODOWSKI, and F. H. STOKES, Lockheed-Georgia Co., Contract No. DA19-129-AMC-856(N), Final Report. 68-55-AD, August 1966 (AD 671682).
- 38. Silicate foam for airdrop cushioning, E. J. BAMER, JR. and W. A. MALLOW, Southwest Research Institute, Contract No. DAAG17-67-C-0114. 68-46-AD, May 1968 (AD 669666).

### Technical Papers

- 39. BENNETT, J. G. Army aviation survival kits. U. S. Air Force/
  Industry Life Support Conference, Las Vegas, Nev., 28 November 1 December 1967; Symposium on Air Movement/Airdrop, U. S. Army
  Combat Development Command, Special Warfare Agency, Fort Bragg,
  N. C., 12-14 December 1967.
- 40. Life support equipment Army aircrew survival and protective clothing and equipment. U. S. Army Materiel Command Briefing, U. S. Continental Army Command, Fort Monroe, Va., 11-12 July 1967.
- 41. CHAKOIAN, G. A parachute retrorocket system for low altitude airdrop of cargo and other special applications. Aerodynamic Deceleration Systems Conference, American Institute of Aeronautics and Astronautics, El Centro, Calif., 23-25 September 1967.
- 42. FALABELLA, G. JR. Individual life support equipment Parachutes and parachute harnesses. U. S. Continental Army Command Aviation Conference, Fort Monroe, Va., 10-11 April 1968.

### AIRDROP ENGINEERING LABORATORY

# Other Publications

43. Emergency release assembly, G. A. LALIBERTE, ADEL Report, unnumbered (7 December 1967).

### Technical Reports

- 44. The application of the concept of reliability to textile products, S. J. KENNEDY and L. I. WEINER. 68-23-CM (TS-153), September 1967 (AD 668907).
- 45. The Army green uniform, S. J. KENNEDY and A. PARK. 68-41-CM (C&OM-43), March 1968.
- 46. Camouflage of the individual soldier at night, A. O. RAMSLEY. 68-37-CM (C&OM-41), March 1968 (AD 831971).\*
- 47. Crashworthiness of aircrew protective armor, J. L. HALEY, JR., C. I. GATLIN, J. L. SCHAMADAN, and J. W. TURNBOW, Flight Safety Foundation, Inc., Contract No. DAAG17-67-C-0138. 68-57-CM (C&OM-47), April 1968 (AD 672504).
- 48. Development of a lightweight butyl-coated stretch fabric, J. P. SHELLEY, Rohm and Haas Co., Contract No. DAAG17-67-C-009. 68-63-CM (C&OM-48), April 1968.
- 49. Development of a multidirectional-stretch spacer fabric, M. W. OLSON, A. S. GLOWACKI, and R. A. FOWKES, Uniroyal, Inc., Contract No. DA19-129-AMC-1069(N). 58-34-CM (C&CM-39), December 1967 (AD 666804).
- 50. Development of a thermoelectric heating and ventilating system, S. F. BAUER and L. J. FOX, Westinghouse Electric Corp., Contract No. DA19-129-AMC-835(N). Report No. WAED 67.30E, October 1967 (AD 644917).
- 51. Development of a waterless hand cleaner, T. KAPALA and G. J. MERRITT. 68-64-CM (C&OM-49), April 1968 (AD 835921).\*
- 52. Direct molded sole boots, A. PARK and D. S. SWAIN. 68-20-CM (F&L-19), September 1967 (AD 666756).
- 53. The effect of melamine resins on the thermal radiation protection provided by a nylon/cotton fabric, E. T. WALDRON, W. KOZA, and H. SHRAGER. 68-17-CM (TS-152), August 1967.
- 54. Engineering research prototype distribution systems for thermalibrium clothing, H. W. AUSTIN, W. C. HESS, and M. THEODORE, Mine Safety Appliances Co., Contract No. DA19-129-AMC-118(N). 68-21-CM (C&OM-37), October 1967 (AD 666226).

### Technical Reports (continued)

- 55. Evaluation of commercial scouring aids for use in U. S. Army kitchens, T. KAPALA and G. J. MERRITT. 68-42-CM (C&OM-44), April 1968 (AD 830784).\*
- 56. Experimental study of a passive thermal control system for space suits, F. VOTTA, JR., NASA Project No. R-135, July 1967.
- 57. Fiber 6: A thermal radiation protective fabric, E. T. WALDRON, A. PARK, H. SHRAGER, and W. KCZA. 68-24-CM (TS-154), Scptember 1967 (AD 386597).\*
- 58. Flow of heat and vapor through composite perm-selective membranes under simulated conditions, F. VOTTA, JR., University of Rhede Island, Contract No. DAAG17-67-C-0061. 68-44-CM (C&OM-45), January 1968 (AD 671681).
- 59. Investigation of materials and systems for protection against flashblindness effects of nuclear detonations (Phase I),
  J. F. DREYER, R. W. HARRIES, R. N. MACNAIR, and D. FELDMAN,
  Polacoat, Inc., Contract No. DA19-129-AMC-112(N). 68-38-CM
  (C&OM-42), February 1968.
- 60. An investigation of water permeation through ultrathin polyurathane membranes, A. L. ALLEN and N. S. SCHNEIDER, NASA Project No. R-135, April 1968.
- 61. Physical properties of ceramic materials for personnel armor, R. S. LIEBLING and H. P. JULIEN, Carborundum Co., Contract No. DA19-129-AMC-280(N). 68-35-CM (C&OM-40), February 1968 (AD 391658).\*
- 62. Polymerization studies leading to high-strength, chemical-resistant elastomers serviceable at temperature extremes, D. I. RELYEA, H. P. SMITH, and A. N. JOHNSON, Uniroyal, Inc., Contract No. DA19-129-AMC-487(N). 68-56-CM (C&OM-46), May 1068.
- 63. Preparation and characteristics of calcium salt of nylon-acrylic acid graft polymer, E. M. HEALY and B. A. NATSIOS. 67-52-CM (C&OM-30), November 1966 (AD 665625).
- 64. Research and development of aircrew armor systems, R. RODZEN, C. LAMBER, F. SCRIBANO, M. BURNS, R. SINGER, and E. BARKON, IIT Research Institute, Contract No. DA19-129-AMC-641(N). 68-3-CM (C&ED-47), July 1967 (AD 822813).\*

١

## Technical Reports (continued)

- 65. Sealed insulated military boots, L. H. L'HOLLIER and A. PARK. 68-32-CM (F&L-20), November 1967 (AD 666752).
- 66. Sorption and diffusion of ethanol in a polyurethane, J. M. NYSTROM and N. S. SCHNEIDER, NASA Project No. R-135, May 1968.
- 57. Strength lesses in nylon parachute materials with time exposure and use, F. FIGUCIA, JR. and R. D. WELLS. 68-45-CM (TS-156), March 1968 (AD 668910).
- 68, Study of yielding phenomena, D. H. ENDER, Massachusetts Institute of Technology, Contract No. DA19-129-AMC-930(N). 68-7-CM (C&OM-36), July 1967.
- 69. Survey of tracing and sensing systems for the detailed study of fibrous materials under tensile-impact loading, B. ROSEN and R. SUPNIK, Plas-Tech Equipment Corp., Contract No. DAAG17-67-C-0167. 68-28-CM (TS-155), November 1967 (AD 664781).
- 70. Synthesis of chromotropic colorants, R. A. COLEMAN, J. KAZAN, and M. VEGA. American Cyanamid Co., Contract No. DA19-129-AMC-269(N). 68-68-CM (TS-157), June 1968.\*
- 71. Synthesis of new fluorine-containing nitroso compounds, copolymers and terpolymers, E. C. STUMP and C. D. PADGETT, Peninsular Chem-Research, Contract No. DA19-129-AMC-152(N). 68-33-CM (C&OM-38), November 1967 (AD 666801).
- 72. The synthesis of special fluorine-containing monomers, J. D. PARK and J. R. LACHER, University of Colorado, Contract No. DA19-129-AMC-869(N). 68-5-CM, July 1967.

#### Journal Articles

- 73. BURROWS, W. D., and J. H. CORNELL. Effect of structure on rates of thermal decomposition of solid benzyldimethylsulfonium salts. J. Organic Chem., 32(12):3840 (12 December 1967).
- 74. CLOUGH, S. B., M. B. RHODES, and R. S. STEIN. The transmission of light by films of crystalline polymers. J. Polymer Sci., Part C, 18:1 (1967).
- 75. \_\_\_\_\_, and R. S. STEIN. Multiple-order light scattering from ringed spherulites. J. Polymer Sci., A-2, 6:783 (1968).

### Journal Articles (continued)

- 76. CLOUGH, S. B., and R. S. STEIN. Scattering of light by ringed spherulites containing biaxial crystals. J. Appl. Phys., 38(11):4446 (1967).
- 77. DeMARCO, C. G., H. MARKARIAN, J. J. PRATT, JR., and H. K. GOUCK.
  The compatability of arthropod repellents with certain functional finishes of cotton uniform fabric. J. Economic Entomology,
  61:2 (April 1968).
- 78. DESPER, C. R. A simple graphical relationship between the triangular orientation function plot and the spherical harmonic expansion coefficients for biaxially oriented polymers. J. Appl. Phys., 39(1):344 (January 1968).
- 79. , and J. KIMURA. Mathematics of the polarized fluorescence experiment. J. Appl. Phys., 38(11):4225 (October 1967).
- 80. , and R. S. STEIN. Randomization of orientation of films and fibers. J. Polymer Sci., Part B, 5(10):893 (October 1967).
- 81. KENNEDY, S. J., and L. I. WEINER. The application of the concept of reliability to textile products. Textile Inst. and Industry, 5(1):13-19 (January 1968).
- 82. MACNAIR, R. N. A fatigue mechanism for thermochromism in leuco-sulfites of triphenylmethane compounds. J. Organic Chem., 33(5):1945-7 (May 1968).
- 83. Photochromism vs phototropism. Chem. Eng. News, 45:6-7 (30 October 1967)
- 84. Photochromism in triphenylmethanes. Photochem. and Photobiol., 6(11):779-797 (1967).
- 85. MILES, T. D. Flame resistant textiles. Bull. N.Y. Acad. Med., 43(8):723 (August 1967).
- 86. , and A. C. DELASANTA. Durable non-reactive flame-retardant finishes for cotton. Textile Research J., 38:3 (March 1968).

### Journal Articles (continued)

- 87. SCHNEIDER, N. S., L. V. DUSABLON, L. A. SPANO, and H. B. HOPFENBERG. Sorption and diffusion of water in a rubbery polyurethane. J. Appl. Polymer Sci., 12:527 (1968).
- 88. SPANO, L. A., H. J. BIXLER, and A. S. HOFFMAN. New polymeric material holds key to pervaporative snace suit cooling.

  Space/Acronautics, pp. 107-113 (December 1967).
- 89. TRASKOS, R. T., N. S. SCHNEIDER, and A. S. HOFFMAN. Elution column fractionation of branched polyethylene. J. Appl. Polymer Sci., 12:509 (1968).
- 90. WELLS, R. D. Patterns of flow of technical information a design problem for the textile industry. Textile Research J., 38:4 (April 1968).

ABBITATION OF A CONTROLL OF A CONTROL OF A CON

### Technical Papers

- 91. BARRON, E. R. The application of lightweight armor materials to U. S. combat protective clothing. Society of Aerospace Materials and Process Engineers, Anaheim, Calif., 9-11 October 1967.
- 92.

  , and A. L. ALESI. Plastic-ceramic composite armor for Vietnam. Society of Plastics Industry, Reinforced Plastics Composites Division, Washington, D. C., 6 February 1968.
- 93. CLOUGH, S. B. Melting of stress-crystallized polyethylene films. American Physical Society, Berkeley, Calif., 21 March 1968.
- 94. Ordering and transitions in polyurethane elastomers.

  Plastics and Elastomers Group, Northeastern Section, American
  Chemical Society, Natick, Mass., 16 April 1968.
- 95. DESPER, C. R. The structure and properties of extruded polycthylene films. Pittsburgh Diffraction Conference, Mellon Institute, Pittsburgh, Pa., 3 November 1967.
- 96. Studies of the orientation of czystalline polymers
  by X-ray diffraction, birefringence and light scattering.
  Eastern Analytical Symposium, New York, N. Y., 9 November 1967.
- 97. HENRY, M. C. Synthesis and applications of organo-lead compounds. First International Conference on Lead and its Applications, U. S. Army Natick Laboratories, Natick, Mass., 19 July 1967.

- 98. KENNEDY, S. J. The design of quality uniforms. Clothing and Textiles Seminar, Defense Supply Agency, Alexandria, Va., 20 May 1968.
- 99. Development of specifications for clothing and textile procurement. Quality and Reliability Council Meeting, Defense Supply Agency, Alexandria, Va., 3 April 1968.
- Functional design in military clothing. New York

  Stat College of Home Economics, Cornell University, Ithaca,
  N. Y., 2 April 1963.
- Marketing industrial and military fabrics from a consumer's viewpoint. First Annual Textile Marketing Forum Clemson University, Clemson, S. C., 7 May 1968.
- 102. Perspective and direction for research in today's textile industry. Research Seminar, American Textile Manufacturers' Institute, Inc., Atlanta, Ga., 24 April 1968.
- 103. Research in clothing. New York State College of
  Home Economics, Cornell University, Ithaca, N. Y., 1 April 1968.
- 104. MACNAIR, R. N. Flashblindness and laser beam problems. E. I. duPont de Nemours Technical Representatives, U. S. Army Natick Laboratories, Natick, Mass., 4 October 1967.
- 105. McQUADE, A. J. Firemen's coats and trousers. National Fire Protection Association, Boston, Mass., 17 April 1968.
- 106. Fire resistant fabrics today. New England Region,
  American Association of Textile Chemists and Colorists, Portsmouth, N. H., 18 May 1968.
- 107. Flameproofing textile fabrics. Southern Textile Research Conference, American Association of Textile Chemists and Colorists, Hilton Head, S. C., 16 May 1968.
- 108. MILES, T. D. Durable non-reactive flame-retardant finishes for cotton. Chemical Finishing Conference, National Cotton Council, Washington, D. C., 26-28 September 1967.
- 109. POPE, C. J. Sandblast abrader. American Association of Textile Chemists and Colorists Committee RA-29 on Abrasion, New York, N. Y., 14 February 1968.

### Technical Papers (continued)

- 110. PROSSER, R. A., and J. T. STAPLER. A new approach to protection against intense light energy. Army Science Conference, West Point, N. Y., 18-21 June 1968.
- 111. SCHNEIDER, N. S. Water vapor transport in structurally varied polyurethanes. Plastics and Elastomers Group, Northeastern Section, American Chemical Society, Natick, Mass., 16 April 1968.
- 112. , L. V. DUSABLON, L. A. SPANO, and H. B. HOPFENBERG. Water vapor transport in structurally varied polyurethanes. Army Science Conference, West Point, N. Y., 18-21 June 1968.
- 113. SPANO, L. A. Protective clothing systems for troops. Fort Dietrick, Md., 6 June 1968.
- 114. WILSON, A. Army requirements for elastomers. Symposium on Elastoplastics in Commercial and Governmental Applications, The Society of Plastics Industry, New York, N. Y., 4 June 1968.
- Elastomer applications to personnel clothing and equipment. Rock Island Arsenal, Ill., 10 October 1967.
- 116. Low-temperature properties of elastomers. Technical Information Exchange Meeting on Elastomers, Rock Island Arsenal, Ill., 10 October 1967.
- 117. YELLAND, W. E. C. Thermal and flame protection problems. E. I. duPont de Nemours Technical Representatives, U. S. Army Natick Laboratories, Natick, Mass., 4 October 1967.

### Book Chapters

- 118. HENRY, M. C., and C. B. GRIFFIS. Synthesis, compounding and properties of nitroso rubbers. <u>In</u> Fluorine Chemistry Reviews, Vol. 1, P. Tarrant (edit.), Marcel Dekker, Inc., New York, N. Y. (1967).
- 119. RUDOLPH, G., and M. C. HENRY. Bis(2,4-pentanedionato) zinc acetylacetonate. In Inorganic Synthesis, Vol. 10, E. L. Muetterties (edit.), McGraw-Hill Book Co., New York, N. Y. (1967).

### Book Chapters (continued)

- 120. STEIN, R. S., P. F. ERHARDT, S. B. CLOUGH, and J. J. VAN AARTSEN. The scattering of light by solid polymer films having partially ordered structure. In Electromagnetic Scattering, Gordon and Breach Science Publishers, New York, N. Y. (1967).
- 121. ZENZ, R. W. Structure-properties relations in high polymers.

  In Organic Chemistry of Synthetic High Polymers, Interscience
  Publishers, New York, N. Y. (1967).

### Other Publications

- 122. ALESI, A. L., and E. R. BARRON. Plastic-ceramic composite armor for Vietnam. Proc. of Conference, Society of Plastics Industry, Reinforced Plastics Composite Division, Washington, D. C. (February 1968).
- 123. BARRON, E. R., P. E. DURAND, R. SMITH, and A. L. LASTNIK. The application of lightweight armor materials to U. S. combat protective clothing. Proc. of the 12th National Symposium, Society of Aerospace Materials and Process Engineers, Anaheim, Calif. (9-11 October 1967).

#### EARTH SCIENCES LABORATORY

### Technical Reports

- 124. Arthropods of medical importance in Australia and the Pacific Islands, Parts I and II, B. V. TRAVIS, R. M. LABADAN, and H. H. LEE, Cornell University, Contract No. DA19-129-AMC-664(N). 68-61-ES (ES-36), May 1968.
- 125. Arthropods of medical importance in Latin America, Parts I and II, B. V. TRAVIS and R. M. LABADAN, Cornell University, Contract No. DA19-129-AMC-417(N). 68-30-ES (ES-35), December 1967 (AD 666757 and AD 666761).
- 126. A bibliography of arid-lands bibliographies, P. PAYLORE, University of Arizona, Contract No. DAAG17-67-C-0199. 68-27-ES (ES-34), October 1967 (AD 663843).
- 127. The food geography of mainland Southeast Asia, T. E. NIEDRINGHAUS. 68-39-ES (ES-38), June 1968.
- 128. A general nomograph for normal and skewed frequency distributions: Climatological and other applications, E. E. LACKEY. 68-40-ES (ES-26), July 1967 (AD 667929).
- 129. Sequential study of desert flooding in the White Mountains of California and Nevada, C. B. BEATY, University of Montana, Contract No. DA19-129-AMC-987(N). 68-31-ES (ES-37), January 1968 (AD 667978).

### Journal Articles

- 130. ANSTEY, R. L. The physical environment of the Canal Zone in Panama. Revista Geografica, 66:163-188 (1967).
- 131. DALRYMPLE, P. C., and L. A. STROSCHEIN. Radiation climatology at Plateau Station, U. S. Antarctic J., p. 159 (September-October 1967).
- 132. DODD, A. V. Draft regulation outlines design, testing climatic criteria. Army R&D Newsmagazine, 8(11):6-7 (December 1967).
- 133. LIESKE, B., and L. A. STROSCHEIN. Measurements of radiative flux divergence in the Arctic. Arch für Meteorologie, Series B, 5:1-2 (1967).
- 134. SHARON, D. On the further development of Gringorten's stochastic model for climatological predictions. J. Appl. Meteorology, 6(4):625-630 (August 1967).

#### EARTH SCIENCES LABORATORY

### Technical Papers

- 135. KUHN, M. Radiation program at Plateau, 1967. American Meteorological Society, First Annual Conference on Solar Energy, Newport, R. I., March 1968.
- 136. SHARON, D. Probability prediction of temperature persistence.

  Conference on Agricultural Meteorology, American Meteorological
  Society, Ottawa, Can., 21-23 May 1968.

#### Books

137. The ecology of malnutrition in Northern Africa, J. M. MAY.

Studies in Medical Geography, Vol. 7, Contract No. DA19-129AMC-240(N), Hafner Publishing Co., New York, N. Y. (1967)
(AD 661755).

### Other Publications

- 138. BURDICK, C. L. The geological, glaciological, and botanical reports taken during the 1964 and 1966 expeditions to Eastern Turkey and Mount Ararat (Geological Report), Archaeological Research Foundation. Contract Natick Laboratories No. 214 (December 1967).
- 139. DODD, A. V. Considerations in revision of Army climatic criteria, 1968. Proc. Institute of Environmental Sciences (May 1968).
- 140. DREGNE, H. E. Inventory of research on surface materials of desert environments, University of Arizona, Tucson, Ariz., Contract No. DA49-092-ARO-71 (1967).
- 141. LOWE, C. H. Inventory of research on fauna of desert environments, University of Arizona, Tucson, Ariz., Contract No. DA49-092-ARO-71 (1968).
- 142. LUSTIG, L. K. Inventory of research on geomorphology and surface hydrology of desert environments, University of Arizona, Tucson, Ariz., Contract No. DA49-092-ARO-71 (1967). AD 664543.
- 143. McGINNIES, W. G., and J. W. MEADOWS, JR. Introduction to an inventory of geographical research on desert environments, University of Arizona, Tucson, Ariz., Contract No. DA49-092-ARO-71 (1968).

### EARTH SCIENCES LABORATORY

### Other Publications (continued)

- 144. McGINNIES, W. G. Inventory of research on vegetation of desert environments, University of Arizona, Tucson, Ariz., Contract No. DA49-092-ARO-71 (1967).
- 145. SCHREIBER, J. F., JR. Inventory of research on desert coastal zones, University of Arizona, Tucson, Ariz., Contract No. DA49-092-ARO-71 (1967).
- 146. SIMPSON, E. S. A general summary of the state of research on ground-water hydrology in desert environments, University of Arizona, Tucson, Ariz., Contract No. DA49-092-AR0-71 (1967).
- 147. WEXLER, R. L. The relationship between daily and annual rainfall in Thailand, Air Weather Service (AWS) Technical Report No. 196, pp. 226-242 (July 1967).

### Technical Reports

- 148. Compressed food components to minimize storage space, J. R. DURST, The Pillsbury Company, Contract No. DA19-129-AMC-860(N). 68-22-FL (FL-64), October 1967 (AD 662060).
- 149. The development of built-in mechanisms for softening and rehydrating compacted food bars, R. A. LAMP!, FMC Corporation, Contract No. DA19-129-AMC-44(N). 68-13-FL (FL-66), December 1967 (AD 663827).
- 150. Effect of headspace oxygen on the quality of freeze-dried beef and chicken stew, J. M. TUOMY, L. HINNERGARDT, and R. L. HELMER. 68-65-FL (FL-78), May 1968 (AD 671628).
- 151. Effect of processing conditions in the quality of cooked, sliced, freeze-dried beef, J. M. TUOMY, R. L. STENTZ, and R. L. HELMER. 68-53-FL (FL-70), April 1968 (AD 669618).
- 152. Evaluation of sampling systems applied to fat content of ground beef, R. LUKSICH and S. J. WERKOWSKI. 68-18-FL (FL-61), October 1967 (AD 821681).\*
- 153. Food consumption on the Gemini IV, V, and VII missions, P. A. LACHANCE, R. A. NANZ, and M. V. KLICKA, National Aeronautics and Space Administration, NASA TM X-58010, October 1967.
- 154. Growth of plant cultures I. Isolation of cultures, selection of media, and effects of frequency of transfer, M. MANDELS, A. MAGUIRE, and H. M. EL-BISI. 68-6-FL (FL-58), July 1967 (AD 659344).
- 155. Interrelationships between storage stability and moisture sorption properties of dehydrated foods (Phase II), N. LAINE, Melpar, Inc., Contract No. DA19-129-AMC-252(N). 68-62-FL (FL-75), May 1968 (AD 671679).
- 156. Study of computer procedures for menu planning and recipe service for DoD elements, R. T. BAUST, Adams Associates, Inc., Contract No. DAAG17-67-C-0131. 68-2-FL (FL-62), July 1967 (AD 661624).
- 157. Study of military weight requirements for raw pork loins, D. R. BELLIS and J. L. SECRIST. 68-29-FL (FL-59), December 1967 (AD 664766).

### Technical Reports (continued)

158. Study of the water binding properties of freeze-dehydrated meat in relation to protein composition and processing treatment, B. J. LUYET and A. P. MacKENZIE, American Foundation for Biological Research, Contract No. DA19-129-AMC-63(N). 67-90-FL (FL-57), June 1967 (AD 661098).

### Journal Articles

- 159. BELLIS, D. R., J. L. SECRIST, and M. J. LINSKEY. A comparison of solvent and thermal techniques for actermining the fat content of ground beef. J. Food Sci., 32:521-24 (September-October 1967).
- 160. BRYNJOLFSSON, A. Machine irradiation sources and irradiation technology. Chemical Engineers Progress Symposium Series No. 83 (Chemical and Food Application of Radiation), 64:71-86 (1968).
- 161. HEILIGMAN, F. Radiation preservation of seafoods. Food Irradiation, 7(4):19-24 (1967).
- 162. HOLLENDER, H. A., M. V. KLICKA, and P. A. LACHANCE. Space feeding meeting the challenge. Cereal Sci. Today, 13:2 (February 1968).
- 163. JOSEPHSON, E. S., A. BRYNJOLFSSON, and E. WIERBICKI. Engineering and economics of food irradiation. Trans., N. Y. Acad. Sci., 30:4 (February 1968).
- nand E. WIERBICKI. Status of the U.S. Army program in food irradiation. Chemical Engineers Progress Symposium Series No. 83 (Chemical and Food Application of Radiation), 64:87-95 (1968).
- 165. KILLORAN, J. J., J. D. BREYER, and E. WIERPICKI. Development of flexible containers for irradiated foods. I. Screening of commercially available plastic laminates. Food Technol., 21(8):73-77 (1967).
- 166. KLICKA, M. V., H. A. HOLLENDER, and P. A. LACHANCE. Foods for astronauts. J. Am. Dietetic Assoc., 51(3):238-245 (September 1967).

### Journal Articles (continued)

- 167. KOHN, R. Radiation-induced changes on beef fat-cephalin mixtures by gamma radiation. Inhibition of cis-trans isomerization. J. Am. Oil Chem. Soc., 45(2):63-66 (1967).
- 168. LACHANCE, P. A., M. V. KLICKA, and H. A. HOLLENDER. Space feeding: Cereal food products utilized in the U. S. manned space program. Cereal Sci. Today, 13:2 (February 1968).
- 169. MANDELS, M., F. W. PARRISH, and E. T. REESE. B (1, 3) glucanases from plant callus cultures. Phytochem., 6:1097-1100 (1967).
- 170. POWERS, E. M. Microbiological burden on the surfaces of Explorer XXXIII Spacecraft. Appl. Microbiol., 15:1045-1048 (1967).
- A method for obtaining free bacterial spores of
  B. Subtilus var. niger. Appl. Microbiol., 16:180-181 (1968).
- 172. PREVITE, J. J. The immunogenicity of irradiated Salmonella typhimurium cells and endotoxin. J. Bacteriol., 95:6 (June 1968).
- 173. ROWLEY, D. B., F. FEEHERRY, and H. M. EL-BISI. Effect of sodium chloride and irradiation on the germination and outgrowth of Clostridium botulinum 62A. Bacteriol. Proc., 35 (1968).
- 174. SNYGG, B. G., and N. MOLIN. Effect of lipid materials on heat resistance of bacterial spores. Appl. Microbiol., 15:1422-1426 (1967).
- 175. TUCMY, J. M., and R. L. HELMER. Effect of freeze drying on the quality of the Longissimus Dorsi muscle of pork. Food Technol., 21(4):107-169 (April 1967).

### Technical Papers

- 176. ANDERSON, E. E. Productivity, the manager's primary goal.

  Army Personnel Management Assistance Course, New York, N. Y.,
  16 October 1967.
- 177. BAKER, L. J. Radiation preservation of foods. Framingham State College, Framingham, Mass., 9 July 1967.

- 178. BROCKMANN, M. C. Military food research and development. U. S. Army Quartermaster School, Fort Lee, Va., 6 December 1967 and 15 May 1968.
- 179. BRYNJOLFSSON, A. Dosimeter response to gamma radiation. Dosimetry Workshop, National Bureau of Standards, Gaithersburg, Md., 9 April 1968.
- Induced radioactivity. Radiation Training

  Course, Michigan State University, East Lansing, Mich., 19 June11 August 1967.
- 181. COHEN, J. S., J. J. KILLORAN, and E. WIERBICKI. Development of flexible containers for irradiated foods. II. High dose electron and gamma irradiation of meat products in flexible packages. Institute of Food Technologists. Philadelphia, Pa., 23 May 1968.
- 182. COOPER, R. D. Preservation of food by ionizing radiation.
  Society for Applied Spectroscopy, Boston, Mass., 7 May 1968.
- 183.

  , D. M. LINEKIN, and G. L. BROWNELL. Analysis of biological tissue without chemical separation. Symposium, Medicine No. 11, Oak Ridge, Tenn., 13-16 November 1967.
- 184. CROWLEY, N. H. Careers in home economics. Framingham State College, Framingham, Mass., 22 April 1968.
- 185. EL-BISI, H. M. Promises and problems in food microbiology. U. S. Public Health Service Clinical Society, U. S. Public Health Service Hospital, Boston, Mass., 13 November 1967.
- Wholesomeness of irradiated foods microbiological safety. Radiation Training Course, Michigan State University, East Lansing, Mich., 28 July 1967.
- 187. , and J. J. PREVITE. Potential of irradiation in the control of Salmonellae. Salmonellae in Foods Conference, Pennsylvania State University, University Park, Pa., 18-21 March 1968.
- 188. GHOSE, T. K. Foods of the future. Regional Food Conference, U. S. Department of Health, Education and Welfare, U. S. Public Health Service, Boston, Mass., 8 May 1968.

### Technical Papers (continued)

- 189. HEILIGMAN, F. General outlook for radiation preservation of foods. Milton Kiwanis Club, Milton, Mass., 14 September 1967.
- ing. New York Chapter, Institute of Food Technologists, New York, N. Y., 20 September 1967.
- 191. Radiation preservation of foods. Massachusetts

  State Scientists Association, Framingham, Mass., 21 November
  1967; Food Service Personnel and Food Service School Co.,
  Camp Lejeune, N. C., 9-11 April 1968.
- 192. HOLLENDER, H. A. Convenience foods the Army way. International Society of Food Service Consultants, Chicago, Ill., 17 May 1968.

Ţ

- Increasing the advantages of dehydration by means of compression. Dehydrated Foods Industry Council, Philadelphia, Pa., 15 September 1967.
- Space foods. Youth Group, Baptist Church,
  Holliston, Mass., 12 November 1967; Cub Scouts, Pine Hill
  School, Sherborn, Mass., 28 February 1968.
- 195. JARRETT, R. D. Recent development of high dose radiation dosimetry.

  Dosimetry Workshop, National Bureau of Standards, Gaithersburg,

  Md., 8 April 1968.
- 196. JOSEPHSON, E. S. Economics and commercialization of radiation sterilized foods. Bhabha Atomic Research Centre, Bombay, India, 8 November 1967.
- 197. Microbiology of radiation sterlized foods.

  Bhabha Atomic Research Centre, Bombay, India, 7 November 1967.
- 198. Packaging of radiation sterlized foods. Bhabha
  Atomic Research Centre, Bombay, India, 6 November 1967.
- Preservation of foods by ionizing radiation.

  Local Sections, American Chemical Society, Winter Park,
  Titusville, Winter Haven, and Jacksonville, Fla., 5-8 December 1967.
- 200. Radiation preservation of food. American
  Women's Group of Bombay, Bombay, India, 8 November 1967; N. E.
  Chapter, Health Physics Society, Natick, Mass., 3 April 1968.

- 201. JOSEPHSON, E. S. Radiation sterilization of food. Nuclear Week Press, New York, N. Y., 20 May 1968.
- 202. Radiation sterilization of food in the U.S.A.

  Conference on Radioisotopes, Tokyo, Japan, 13-16 November 1967.
- 203. Technology of radiation sterilized foods.

  Bhabha Atomic Research Centre, Bombay, India, 1 November 1967.
- 204. Wholesomeness of irradiated foods. Bhabha Atomic Research Centre, Bombay, India, 31 October 1967.
- 205. , and F. HEILIGMAN. The U. S. Army food irradiation program. Texas Department of Mental Health and Mental Retardation, Austin, Tex., 27 March 1968.
- 206.

  , and E. WIERBICKI. Irradiation of specific foods; general considerations; high dose treatments. Food Irradiation Course, Michigan State University, East Lansing, Mich., 13 July 1967.
- 207.

  , and E. WIERBICKI. Relation of the temperature of irradiation to the effects of ionizing radiation on foods. Food Irradiation Course, Michigan State University, East Lansing, Mich., 12 July 1967.
- 208. KILMORE, M. A., S. M. SWIFT, J. LAWRENCE, M. BAYUSIK, and W. K. CALHOUN. Kemamide U a metabolizable, utilizable, high melting point fatty acid amide. Federation of American Societies for Experimental Biology, Atlantic City, N. J., 15-20 April 1968.
- 209. KLICKA, M. V. Army rations. Walter Reed Army Medical Center, Washington, D. C., 8 November 1967.
- 210. Aspects of acceptability and nutrition of space foods. Cornell University, Ithaca, N. Y., 12 October 1967.
- 211. Combat feeding systems and current advances in food research. U. S. Army Quartermaster School, Fort Lee, Va., 5 December 1967 and 15 May 1968.

- 212. KLICKA, M. V. Foods for astronauts. Cooperative Extension Association, Watertown, N. Y., 16 November 1967; Madison County 4-H Economics Division, Morrisville, N. Y., 22 April 1968; New York State University, Morrisville, N. Y., 22 April 1968; Brookwater School, Framingham, Mass., 1 May 1968; College Volunteer Group, Assumption College, Worcester, Mass., 9 June 1968; The Christian Woman's Club, Framingham, Mass., 10 June 1968.
- 213. Foods for astronauts and operational rations.

  Canterbury Woods School Seminar, U. S. Department of Agriculture, Washington, D. C., 4 December 1967.
- Operational rations, current and future. U. S.

  Army Transportation School, Fort Eustis, Va., 30 November 1967 and 21 June 1968.
- 215. Research on space foods. Waltham Women of Rotary,
  Sudbury, Mass., 25 October 1967.
- Space foods. Nutrition Workshop, Keene State

  College, Keene, N. H., 4 August 1967; New York State Home
  Economics Association, Plattsburgh, N. Y., 11 October 1967;
  Ford Junior High School, Acushnet, Mass., 22 March 1968;
  St. Anselm's College, Manchester, N. H., 20 May 1968.
- 217. Space foods and operational rations. Couples Club, Unitarian Church, Framingham, Mass., 20 October 1967.
- 218. Space food developments. Northeastern University,
  Boston, Mass., 11 January 1968.
- 219. Space food developments and new military rations.

  Central Massachusetts Section, American Chemical Society,
  Worcester, Mass., 15 February 1968; Apponequet Regional High
  School, East Freetown, Mass., 28 February 1968.
- 220. LEE, F. H. New utilization of food processes. Cushing Hospital Auxiliary, Framingham, Mass., 15 May 1968.
- 221. Recipe development. Dietetic Interns, Massachusetts
  General Hospital, Boston, Mass., 4 April 1968; Dietetic Interns,
  Frances Stern Food Clinic, N. B. Medical Center, Boston, Mass.,
  3 May 1968.

- 222. MABROUK, A. F., J. K. JARBOE, and E. M. O'CONNOR. Water-soluble flavor precursors of beef. American Chemical Society, Chicago, Ill., 10-15 September 1967.
- polar lipids of beef. American Chemical Society, Chicago, Ill., 10-15 September 1967.
- 324. MARTIN, T. G. Isomeric radioactivity, Suffolk University, Boston, Mass., 13 March 1968.
- 225. MATTHERN, R. O. HILIS a high intensity light system for algae food production. Army Science Conference, U. S. Military Academy, West Point, N. Y., 18-21 June 1968.
- 226. MEHRLICH, F. P. Adventures in food. Men's Group, First Congregational Church, Wellesley Hills, Mass., 16 March 1968.
- 227. The present status and probable future impact of freeze-dry and irradiated foods on frozens. National Association of Food Chains, New York, N. Y., 16-18 October 1967.
- 228. Troop support subsistence. Research and Development Associates, Baltimore, Md., 15-17 April 1968.
- 229. PORTER, W. L., A. S. HENICK, S. CUNNOLD, M. A. SHARKEY, and S. WARRINGTON. Autoxidation of monolayers of linoleic acid on silica gel. American Oil Chemists' Society, Chicago, Ill., October 1967.
- 230. PRELL, P. A. Food frontiers. Life saver TOPS, Natick, Mass., 25 September 1967; Westboro Women's Club, Westboro, Mass., 9 January 1968; K. C. ettes, West Newton, Mass., 10 January 1968; Brookline High School, Brookline, Mass., 25 January 1968; Glasgow Men's Club, Stoneham, Mass., 12 February 1968; YWCA, South Natick, Mass., 27 February 1968; Needham Quota Club, Newton, Mass., 27 February 1968.
- 231. Space foods. Dietetic Interns, Massachusetts
  General Hospital, Boston, Mass., 4 April 1968.
- 232. PREVITE, J. J. The immunogenicity of irradiated Salmonella typhimurium, cells and endotoxin. American Society of Microbiology, Detroit, Mich., 5-10 May 1968.

- 233. PREVITE, J. J., and Y. CHANG. Effects of radiation sterilization on the antigenic components of Salmonella typhimurium.

  New England Branch, American Society for Microbiology, Boston, Mass., 17-18 November 1967.
- 234. ROWLEY, D. B., A. ANELLIS, AND H. M. EL-BISI. Microbiological aspects of radiation sterilized foods. Summary Progress Report, Interagency Botulism Research Cocrdinating Committee, Washington, D. C., 3-4 June 1968.
- provided and irradiation on the germination and outgrowth of spores of Clostridium botulinum 62A. American Society for Microbiology, Detroit, Mich., 5-10 May 1968.
- 236. STRASSER, J., J. G. KAPSALIS, and J. W. GIFFEE. Freeze desic-cation a new method of food preservation. Army Science Conference, U. S. Military Academy, West Point, N. Y., 18-21 June 1968.
- 237. TUOMY, J. M., H. T. SCHLUP, and R. L. HELMER. Effect of cooking temperature and time on the tenderness of precooked freeze-dried turkey white meat. Institute of Food Technologists, Philadelphia, Pa., 19-24 May 1968.
- 238. UMINA, A. P. Research and development in cereal and bakery products for military feeding. U. S. Army Quartermaster School, Fort Lee, Va., 29 September 1967.
- 239. WADSWORTH, C. K. Status of the U. S. Army program in food irradiation. Scientific Advisory Committee, Pacific Dairy and Poultry Association, Fresno, Calif., 30 October 1967; Defense Personnel Support Center, Seattle, Wash., 2 November 1967.
- 240. WESTCOTT, D. E. New bakery products for military feeding.
  Bakers Educational Group of New England, Natick, Mass.,
  30 October 1967.
- 241. Research and development in cereal and bakery products for military feeding. U. S. Army Quartermaster School, Fort Lee, Va., 3 April 1968.

## FOOD LABORATORY

## Technical Papers (continued)

- 242. WHITE, V. M. Foods for tomorrow. North Carolina School Food Service Association, Charlette, N. C., 5 March 1968; Area 6, Massachusetts School Food Service Association, Winthrop, Mass., 3 April 1968; New York State School Food Service Convention, Rochester, N. Y., 19 April 1968.
- 243. Food for the future. Vermont School Food Service Association Convention, Burlington, Vt., 20 October 1968.
- 244. Rations. Dietetic Interns, Massachusetts General Hospital, Natick, Mass., 4 April 1968.
- 245. WIERBICKI, E. Radiation preservation of foods. U. S. Army Training Center, Fort Leonard Wood, Mo., 28 February 1968.

## Book Chapters

246. COOPER, R. D., D. M. LINEKIN, and G. L. BROWNELL. Activation analysis of biological tissue without chemical separation.

In Nuclear Activation Techniques in the Life Sciences, International Atomic Energy Agency (IAEA), Vienna, pp. 65-80 (1967).

## Other Publications

- 247. DYMSZA, H. A., G. S. STOEWSAND, J. J. ENRIGHT, D. AMENT, and P. C. TREXLER. Interrelationship between diet and intestinal microflora in gnotobiotes. <u>In Proc. of the Seventh International Congress of Nutrition</u>, Vol. 5 (1966).
- 248. JOSEPHSON, E. S., G. L. BROWNELL, B. MANOWITZ, and D. E. HARMER. Chemical and food application of radiation. Chemical Engineers Progress Symposium Series No. 83, American Institute of Chemical Engineers, Vol. 64 (1968).
- 249. STOEWSAND, G. S., and H. A. DYMSZA. Synthetic sources of calories in the diets of rats and dogs. <u>In Proc. of the Seventh International Congress of Nutrition</u>, Vol. 4 (1966).

## Technical Reports

- 250. Development of the heater, immersion, M-67, liquid-fuel-fired, for corrugated cans, C. J. McKEOWN. 68-25-GP, November 1967 (AD 665390).
- 251. Development of ice cream plant, continuous flow, portable,
  B. B. THOMAS and F. W. FRANKE. 68-36-GP, March 1968 (AD 667930).
- 252. Evaluation of highly weather-resistant corrugated fiberboard, P. T. BURKE. 68-58-GP, May 1968 (AD 670927).
- 253. Evaluation of wax-impregnated corrugated fiberboard containerizers and sheathing, A. MILLER. 68-19-GP, October 1967 (AD 663842).
- 254. The mechanics of rupture of cotton-dacron blended yarns, C. J. MONEGO. 68-16-GP, July 1967 (AD 667931).
- 255. Storage stability of Civil Defense shelter rations. S. P. CECIL and J. G. WOODROOF, University of Georgia, Contract No. DA19-129-QM-2050(N), Annual Report. 68-26-GP, December 1967 (AD 667932).
- 256. The use of an infrared radiometric microscope in the nondestructive determination of flexible package seal defects, R. A. LAMPI. F. FIORI. and K. H. HU. 68-60-GP, May 1968.

## Journal Articles

- 257. FOX, M. Evolutionary operation: A tool for in-plant research. Food Technol., 22:45-52 (March 1968).
- 258. \_\_\_\_, and A. L. DUNGAN. The SPEED field feeding system.

  Cornell Hotel and Restaurant Admin. Quarterly, 9(1):57-68
  (May 1968).
- 259. GRIFFIN, R. G., M. H. NOSRATI, R. A. LAMPI, and J. W. SZCZEBLOWSKI. Bacterial resistance of films. Modern Packaging, 40(14):164-167 (October 1967).
- 260. KILLORAN, J. J., J. D. BREYER, and E. WIERBICKI. Development of flexible containers for irradiated foods. I. Screening of commercially available plastic laminates. Food Technol., 21(8): 73-77 (August 1967).

## Journal Articles (continued)

- 261. KILLORAN, J. J., and D. MAUNDER. Bio-test method for determining integrity of flexible packages of shelf-stable foods. Food Technol., 22(5):81-84 (May 1968).
- 262. MILLER, A. Wax impregnated corrugated: What Army tests revealed. Boxboard Containers, 74:11 (June 1967).
- 263. NEBESKY, E. A. Films, foils and failures. The Review, 47(3): 202-204 (November-December 1967).
- 264. VENETOS, M. A. Performance of fiberboard in military packaging for Vietnam. The Review, 47(6):44 (May-June 1968).

# Technical Papers

- 265. AKREP, J. P. Developments in palletization and containerization. Research and Development Associates, Baltimore, Md., 16 April 1968.
- 266. FOX, M., and A. L. DUNGAN. The SPEED field feeding system.

  Stage VI Exploring Food Systems of the Future, Ithaca, N. Y.,
  6 December 1967; Airline Food Service Seminar, Ithaca, N. Y.,
  25 January 1968.
- 257. KILLORAN, J. J. Irradiated foods. Men's Club, Wesley Methodist Church, Worcester, Mass., October 1967.
- J. S. COHEN, and E. WIERBICKI. High dose electron and gamma irradiation of meat products in flexible packages. Institute of Food Technologists, Philadelphia, Pa., 19-24 May 1968.
- 269. LAMPI, R. A. Methods for predicting package performance. Institute of Food Technologists and The Packaging Institute, Natick, Mass., 19 March 1968.
- 270. Reliability of flexible packages. Research and Development Associates, Baltimore, Md., 16 April 1968.
- 271. MONEGO, C. J., and S. BACKER. The mechanics of rupture of cotton polyester blended yarn. Fiber Society, Inc., Princeton, N. J., 8 September 1967.

# Technical Papers (continued)

- 272. NEBESKY, E. A. Films, foils and failures. Packaging and Materials Handling Seminar, National Institute of Packaging, Handling and Logistic Engineers-Defense Supply Association, Washington, D. C., 9 October 1967.
- 273. The impact of the military packaging program on industry. Institute of Food Technologists and The Packaging Institute, Natick, Mass., 19 March 1968.
- 274. The need for and scope of professionalism in packaging. The Packaging Institute, Chicago, Ill., 4 October 1967.
- Packaging research A challenge to industry.

  Packaging Foundation Board Meeting, East Lansing, Mich.,

  3 November 1967.
- 276. Science and packaging. Department of Food
  Science, University of Illinois, Urbana, Ill., 9 May 1968.
- 277. Some packaging research developments at U. S.

  Army Natick Laboratories. Packaging Management Conference,
  Aerospace Industries Association, Cocoa Beach, Fla., 6-8 March
  1968.
- 278. Some packaging research problems and progress, practical packaging development. Military Packaging Course, University of Wisconsin, Madison, Wis., 30 April 1968.
- 279. PALESE, D. J., and F. J. RUBINATE. Easy-open cans Flex pack, up-to-date. Research and Development Associates, Baltimore, Md. 15-17 April 1968.
- 280. RHA, C., and M. KAREL (Massachusetts Institute of Technology).

  Heat transfer to flexibly packaged foods. I. Comparison of theoretical and experimental heat transfer parameters for ground beef. Institute of Food Technologists, Philadelphia, Pa., 19-24 May 1968.
- 281. RINSCHLER, R. A. Military packaging, packing and container standards. Engineering Institute, University of Wisconsin, Madison, Wis., 29 April 1968.

# Technical Papers (continued)

282. RUBINATE, F. J. Understanding distribution hazards - Climatic conditions. Reliable Packaging Seminar, Rochester Institute of Technology, Rochester, N. Y., 16 May 1968.

## Book Chapters

283. NEBESKY, E. A. Dehydration of foods. <u>In</u> Encyclopedia Britannica, pp. 180-181 (1967).

## Other Publications

- 284. NEBESKY, E. A. The need for and scope of professionalism in packaging. Proc. National Packaging Forum, The Packaging Institute, New York, N. Y., 7:1-8 (2-4 October 1967).
- 285. Some packaging research developments at U. S.

  Army Natick Laboratories. Proc. Packaging Management Conference, Aerospace Industries Association, Washington, D. C.
  (6-8 March 1968).

## Technical Reports

- 286. Anthropometric survey of the Armed Forces of the Republic of Korea, G. L. HART, G. E. ROWLAND, and R. Milina, Rowland and Company, Inc., Contract No. DA19-129-240-480(N). 68-8-PR (EPT-7), July 1967 (AD 661624).
- 287. Human factors evaluation of body-supported aircrewman's buttocks and clotch protective units: Comparison of two heights of crotch protector and three suspension systems, R. L. BURSE. 68-4-PR (EPR-14). July 1967 (AD 658034).
- 288. Proceedings of the sixteenth conference on prevention of micro-biological deterioration of military material. 68-69-PR,
  June 1968 (AD 835564).\*
- 289. Studies on acceptance testing metholology: Preliminary studies on characteristics of taste panel, sample size, and contrast and convergence effects, J. M. KAMEN, D. B. PERYAM, D. R. PERYAM, and B. J. KROLL, Peryam & Kroll Research Corp., Contract No. DA19-129-AMC-734(N). 68-10-PR, July 1967 (AD 666228).

# Journal Articles

- 290. ALTAMURA, M., F. ROBBINS, R. E. ANDRECTTI, L. LONG, JR., and T. HASSELSTROM. Mushroom ninhydrin-positive compounds. J. Agr. Food Chem., 15:1040 (November-December 1967).
- 291. ANGELINI, P., and I. J. PFLUG. Volatiles in controlled apple storage: Evaluation by gas chromatography and mass spectrometry. Food Technol., 21:1643 (December 1967).
- 292. BAR\_OSHUK, L. Water taste in man. Perception and Psychophys., 3:69-72 (1968).
- 293. BISSETT, F. H., M. B. EVANS, and F. W. PARRISH. Acetal exchange reactions. II. Cyclohexylidene derivatives of some glycosides and cyclitols. Carbohydrate Res., 5(2):184 (October 1967).
- 294. BLUHM, A., and J. WEINSTEIN. Photodissociation of nitroso dimers. Nature, 215(5109):1478 (September 1967).

- 295. CLAPP, R. C., F. H. BISSETT, and L. LONG, JR. The reaction of tetrahydro-2H-1,3-oxazine-2-thione and methyl iodide.

  J. Heterocyclic Chem., 5(1):107 (February 1968).
- 296. Rearrangements of 2-(Aminoalkylthio)-2-thiazolines 25,6-dihydro-4H-1,3-thiazines. J. Org. Chem., 32(10):3174 (October 1967).
- 297. DARBY, R. T. Testing cellulose containing plastics for resistance to fungi. Intern. Biodeterioration Bull., 3(2):65-66 (1967).
- 298. , and A. M. KAPLAN. Fungal susceptibility of polyurethanes. Appl. Microbiol., 16(6):900-905 (1968).
- 299. DATEO, G. P., and L. M. ROTH. Occurrence of gluconic acid and 2-hexenal in the defense secretions of three species of Eurycotis. Ann. Entomol. Soc. Am., 60(5):1025 (September 1967).
- 300. DOGLTOTTI, L., and E. HAYON. Flash photolysis of persulfate ions in aqueous solutions. Study of the sulfate and ozonide radical anions. J. Phys. Chem., 71(8):2511 (July 1967).
- 301. , and E. HAYON. Flash photolysis study of sulfite, thiocyanate and thiosulfate ions in solution. J. Phys. Chem., 72:1800 (1968).
- 302. , and E. HAYON. Optical spectrum of SO<sub>3</sub>-radical produced from the photolysis of dithionate ions in solution. Nature, 218:949 (1968).
- , and E. HAYON. Transient species produced in the photochemical decomposition of ceric salts in aqueous solutions. Reactivity of NO<sub>3</sub> and HSO<sub>4</sub> free radicals. J. Phys. Chem., 71(12):3802 (November 1967).
- 304. EVANS, M. E., L. LONG, JR., and F. W. PARRISH. Reaction of carbohydrates with methylsulfonyl chloride in N,N-dimethylformamide. Preparation of some methyl 6-chloro-6-deoxy-glycosides. J. Org. Chem., 33:1074 (1968).
- 305. L. LONG, JR., and F. W. PARRISH. Separation of glycopyranosides on ion exchange resins. J. Chromatography, 32:602 (1968).

- 306. FREER, J. H., and H. S. LEVINSON. Fine structure of <u>Bacillus</u> megaterium during microcycle sporogenesis. J. Bacteriol., 94(2):441-457 (August 1967).
- 307. HEINMETS, F. Cell cell recognition and interaction. Modern Biol., 1:299-313 (1968).
- 308. HOLMES, P. K., and H. S. LEVINSON. Activation of <u>Bacillus megaterium</u> spores with aqueous ethyl alcohol; their <u>deactivation</u> and reactivation. Curr. Modern Biol., 1(4):256-258 (September 1967).
- 309. , and H. S. LEVINSON. Metabolic requirements for microcycle sporogenesis of Bacillus megaterium. J. Bacteriol., 94(2):434-440 (August 1967).
- 310. HYATT, M. T., and H. S. LEVINSON. Water vapor, aqueous ethyl alcohol, and heat activation of <u>Bacillus megaterium</u> spore germination. J. Bacteriol., 95(6):2090-2101 (June 1968).
- 311. KATZ, M., and E. T. REESE. Production of glucose by enzymatic hydrolysis of cellulose. Appl. Microbiol., 16:419 (1968).
- 312. KIBSS, H. O. Effects of natural language mediators on shortterm memory. J. Experimental Psychol., 77(7):13 (1968).
- 313. KRONMAN, M. J., F. M. ROBBINS, and R. E. ANDRECTTI. Reaction of N-bromosuccinimide with lysozyme. Biochim. et Biophys. Acta, 143:462 (1967).
- 314. LANGMUIR, M. E., and E. HAYON. Flash photolysis study of mercury (II) halide complexes in aqueous solution. Rates of reaction of  $\rm X_2-$  radical anions. J. Phys. Chem., 71:3808 (1967).
- 315. LEVINSON, H. S., M. T. HYATT, and P. K. HOLMES. Transition of bacterial spores into vegetative cells. Trans N. Y. Acad. Sci., II, 30(1):81-98 (November 1967).
- 316. LOCKHART, J. M. Extreme body cooling and psychomotor performance.

  Brgonomics, 11(3):249-260 (1968).

- 317. MARKARIAN, H., J. J. PRATT, JR., C. G. DeMARCO, and H. K. GOUCK. The compatability of arthropod repellents with certain functional finishes of cotton uniform fabric. J. Econ. Entomology, 61(2):464-467 (April 1968).
- 318. McGARVEY, J. J., and W. D. McGRATH. Reactions of S(1D) atoms with carbonyl sulfide. Can. J. Chem., 45:2434 (1967).
- 319. MERRITT, C., JR. Forums in focus: Report from Rome--Gas chromatography. Food Technol., 21:120 (1967).
- Report from New York--Gas chromatography. Food Technol., 21:1240 (1967).
- 321. , and A. G. ALTENAU. Selected copper-amine complexes as stationary phases. J. Gas Chromatography, 5:30 (1967).
- 322. PARRISH, F. W., F. H. BISSETT, M. E. EVANS, M. L. BAZINET, W. YEOMAN, and L. LONG, JR. Formation of chloro-deoxy glycosides during sulphonylation of methyl D-glucopyranosides. Carbohydrate Res., 6:503-504 (1968).
- 323. RANDOLPH, D. I. Recovery time of cats following high luminance stimulation. J. Optical Soc. Am., 58(3):424-426 (March 1968).
- 324. REESE, E. T. Extracellular purine B-ribosidases from fungi. Can. J. Microbiol., 14:377-383 (1968).
- 325. , L. B. TOWNSEND, and F. W. PARRISH. Inhibition of purine B-ribosidases by purine nucleosides and nucleoside antiplotics. Arch. Biochem. Biophys., 125:175 (1968).
- 326. ROTH, L. M. Oöthecae of the Blattaria. Ann. Entomol. Soc. Am., 61:83 (January 1968).
- 327. Ovarioles of the Biattaria. Ann. Entomol. Soc. Am., 61:132 (January 1968).
- 328. Oviposition behavior and water changes in the oöthecae of Lophoblatta brevis (Blattaria: Blattellidae: Plectopterinae). Psyche (June 1968).

- 329. ROTH, L. M. Reproduction of some poorly known species of Blattaria. Ann. Entomol. Soc. Am., 61:571 (May 1968).
- 330. Sexual isolation in parthenogenetic Pycnoscelus surinamensis (Linnaeus) and application of the name Pycnoscelus indicus (Fabricius) to its bisexual relative (Dictyoptera: Blattaria: Blaberidae: Pycnoscelinae). Ann. Entomol. Soc. Am., 60(4):774 (July 1967).
- 331. A teratological specimen of Pycnoscelus surinamensis. Ann. Entomol. Scc. Am., 61:777 (May 1968).
- 332. Uricose glands in the accessory sex gland complex of male Blattaria. Ann. Entomol. Soc. Am., 60(6):1203 (November 1967).
- Water changes in cockroach oöthecae in relation to the evolution of ovoviviparity and viviparity. Ann. Entomol. Soc. Am., 60(5):928 (September 1967).
- 334. , and S. COHEN. The chromosomes of the Pycnoscelus complex (Blattaria: Blaberidae: Pycnoscelinae). Psyche (March 1968).
- 335. , and H. B. HARTMAN. Sound production and its evolutionary significance in the Blattaria. Ann. Entomol. Soc. Am., 60(4):740 (July 1967).
- 336. STROM, E. T., A. L. BLUHM, and J. WEINSTEIN. Llectron spin resonance studies of substituent effects. II. Diaryl nitroxides. J. Org. Chem., 32:3853 (December 1967).
- 337. , and J. WEINSTEIN. Free radicals from the irradiation of o-Nitro-benzyl compounds. J. Org. Chem., 32(11):3705 (November 1967).
- 338. TEICHNER, W. H., L. M. PRICE, and T. NALWALK. Suprathreshold clfactory responses of the rat measured by sniffing. J. Psychol., 66:63-75 (1967).
- 339. WALSH, J., and C. MERRITT, JR. Multichannel open tubular columns.

  J. Gas Chromatography, 5(8):420 (August 1967).

## Journal Articles (continued)

- 340. WILEY, B. J., and C. L. KRAMER. Some observations of Acrasieae from Kansas. Trans. Kans. Acad. Sci., 70(3):379-387 (1967).
- 341. ZAGIEBOYLO, W. Initial shock front interaction with solid models. J. Appl. Phys., 38(10):3828-3834 (September 1967).
- 342. Shock-wave in fraction with air-supported structures. Exp. Mechanics (December 1967).

## Technical Papers

- 343. ANGELINI, P. Isolation and analysis of trace amounts of complex organic mixtures. Ar rican Chemical Society, Chicago, Ill., September 1967.
- jand C. MERRITT, JR. The isolation of trace organic components by low temperature, high vacuum distillation. Symposium on Identification and Detection of Components of Flavors, American Chemical Society, Chicago, Ill., September 1967.
- 345. BALL, D. H. Some aspects of branched chain and deoxy-sugar synthesis. Fourth International Carbohydrate Conference, Kingston, Ontario, Can., July 1967; Carbohydrate Discussion Group, Chemical Society, London, England, October 1967.
- 346. , and F. W. PARRISH. Some current aspects of sulfonate ester chemistry. Gordon Research Conference on Chemistry of Carbohydrates, Tilton, N. H., 10-14 June 1968.
- 347. DANZIGER, R. M., E. HAYON, and M. E. LANGMUIR. Pulse radiolysis and flash photolysis study of aquecus solutions of simple pyrimidines. Uracil and bromo-uracil. Symposium on Photochemistry and Radiation Chemistry, Natick, Mass., 22-24 April 1968.
- 348. FLORENTINE, G. J. The probable role of the abdominal receptor in cockroach mating behavior. Entomological Society of America, New York, N. Y., November 1967.
- 349. HAYON, E. Flash photolysis studies of inorganic systems, E.T.H., Zurich, Switzerland, January 1968.

# Technical Papers (continued)

- 350. HAYON, E. Primary radicals yields in the radiation chemistry of water and aqueous solutions, FARKAS Memorial Symposium, Jerusalem, Israel, 26 December 1967.
- 351. HUBER, J. R. Flash photolysis of bianthrone. Clark University, Worcester, Mass., May 1968; Boston University, Boston, Mass., September 1967.
- on Photochemistry and Radiation Chemistry, Natick, Mass., 22-24 April 1968.
- 353. HYATT, M. T., P. K. HOLMES, and H. S. LEVINSON. Activation of Bacillus megaterium spore germination by heat, water vapor, and aqueous ethanol. Northeast Branch, American Society for Microbiology, Boston, Mass., November 1967.
- 354. JACOBS, H. L. Central and peripheral control of food intake.

  Department of Physiology, University of Western Ontario School
  of Medicine, London, Ontario, Can., June 1967; Department of
  Social Psychology, Columbia University, New York, N. Y.,
  January 1968.
- 355. Central and peripheral systems in regulation of food intake. Interdepartment Institute for Training in Research in Behavioral and Neurological Sciences, Albert Binstein School of Medicine, New York, N. Y., June 1967.
- 356. Studies in appetite and hunger. Department of Biology, Clark University, Worcester, Mass., November 1967.
- 357, KRONMAN, M. J. Molecular conformational changes of α lactalbumin. Upstate Medical Center, State University of New York, Syracuse, N. Y., September 1961.
- 358. LANGMUIR, M. E. Current studies in the flash photolysis of aqueous systems. Wellesley College, Wellesley, Mass., May 1968.
- 359. Flash photolysis A technique of fast-reaction kinetics and photochemistry. Seminar, Wellesley College, Wellesley, Mass., 14 May 1968.

## Technical Papers (continued)

- 360. LEVINSON, H. S. Germination and sporulation of Bacillus megaterium. Squibb Institute for Medical Research, New Brunswick, N. J., January 1968.
- 361. The nature of bacterial injury and repair.

  Gordon Research Conference on Microbiological Deterioration,
  Tilton, N. H., July 1967.
- Requirements for undergraduate training of microbiologists for government laboratories. American Academy of Microbiology, Chicago, Ill., July 1967.
- 363. Some aspects of <u>Bacilius megaterium</u> spore germination and postgerminative development. Department of Microbiology and Immunology, McGill University, Montreal, Can., April 1968.
- 364. , M. T. HYATT, and P. K. HOLMES. Transition of bacterial spores into vegetative cells. New York Academy of Sciences, New York, N. Y., October 1967.
- 365. LONG, L., JR., M. E. EVANS, and F. W. PARRISH. Preparation of 6-chloro-6-deoxy glycopyranosides. American Chemical Society, Chicago, Ill., September 1967.
- 366. MERRITT, C., JR. The analysis of volatile flavor compounds by gas chromatography and mass spectrometri. Stonehill College Chemical Society, Easton, Mass., May 1963.
- Automatic processing of gas chromatographic and mass spectrometric datz. Instrument Society of America, Chicage, Ili., September 1967.
- 368. Chemical changes in meat flavor due to irradiation. Food Irradiation Course, Michigan State University, East Lansing, Mich., July 1967.
- Design and performance of a direct-coupled real time spectrum digitizer and a rapid-scanning high-resolution mass spectrometer. International Mass Spectrometry Conference, Berlin, Germany, September 1967.

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## Technical Papers (continued)

- 370. MERRITT, C., JR. Introductory remarks. Symposium on Identification and Detection of Components of Flavors, American Chemical Society, Chicago, Ill., September 1967.
- 371. PRATT, J. J. Protecting our foods from environmental intrusion:
  Pesticides and animal matter as non-intentional food additives.
  Symposium on Food Technology, Philadelphia, Pa., 22 May 1968.
- 372. REESE, E. T. Microbial decomposition of soil polysaccharides.

  Symposium on Organic Matter and Soil Fertility, Pontifical
  Academy of Science, Vatican City, Rome, Italy, April 1968.
- 373. ROTH, L. M. The Alpha-Helix expedition to the Amazon. Harvard University, Cambridge, Mass., May 1968; U. S. Army Natick Laboratories, Natick, Mass., November 1967.
- 374. Chemical communication and sexual behavior in cock-roaches. Symposium on Communication by Chemical Signals, Clark University and Army Research Office. Framingham, Mass., 18 July 1968.
- 375. Cockroach evolution. Cambridge Entomological Club, Cambridge, Mass., December 1967.
- 376. Evolution of male tergal glands of Blattaria.

  Entomology Society of America, New York, N. Y., November 1967.
- The evolution of reproduction in cockroaches.

  University of Texas, Austin, Texas, 17 May 1968.
- 378. Mechanisms controlling reproduction in cockroaches.
  University of Massachusetts, Boston, Mass., 26 January 1968.
- 379. Reproduction, evolution and the taxonomy of cock-roaches. University of Rhode Island, Kingston, R. I., November 1967.
- 380. Reproductive mechanisms (cockroaches). Entomology Society of America, New York, N. Y., November 1967.
- 381. SIMIC, M. Uses and abuses of nitrous oxide in radiation chemicals. Argonne National Laboratory, Argonne, III., April 1968.

## Book Chapters

- 382. CARROL, K. G. Biologic application of the electron probe analyzer. In Viva Techniques in Histology, G. H. Bourne (edit.), Williams and Wilkins Co., Baltimore, Md., pp. 69-79 (1967).
- 383. KAPLAN, A. M., R. T. DARBY, M. GREENBERGER, and M. R. ROGERS.
  Microbial deterioration of polyurethane systems. In Developments in Industrial Microbiology, Vol. 9, Chapter 15,
  American Institute of Biological Sciences, Washington, D. C.
  (1968).
- 384. MERRITT, C., JR., P. ANGELINI, and D. J. McADOO. Volatile compounds induced by irradiation in basic food substances.

  In Advances in Chemistry Series No. 65, Radiation Preservation of Foods, p. 26 (1967).
- performance of a direct-coupled real time spectrum digitizer and a rapid-scanning high-resolution mass spectrometer. In Advances in Mass Spectrometry, Vol. 4, E. Kendrick (edit.), Elsevier Publishing Co., London, England (1968).
- 386. ROGERS, M. R., and A. M. KAPLAN. Screening of prospective biocides for hydrocarbon fuels. In Developments in Industrial Microbiology, Vol. 9, Chapter 44, American Institute of Biological Sciences, Washington, D. C. (1968).

# Other Publications

387. ROTH, L. M., and E. WILLIS. The medical and veterinary importance of cockroaches. Smithsonian Miscellaneous Collection, 134(10):147 (1967).

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3. ABSTRACT						
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